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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/812,020

03/30/2004

Kang-seok Cho

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06/23/2006

STAAS & HALSEY LLP

SUITE 700

1201 NEW YORK AVENUE, N.W.

WASHINGTON, DC 20005

EXAMINER

BAE, JI H

ART UNIT

PAPER NUMBER

2115

DATE MAILED: 06/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/812,020

Applicant(s)

CHO, KANG-SEOK

Examiner

Ji H. Bae

Art Unit

2115

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>3-30-2004, 11-28-2005, 2-21-2006, 3-03-2006</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claim 18 is objected to because of the following informalities: there appears to be a typographical error in line 1 ("A method of control a computer system..."). Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 3, 5, and 9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claims 3 and 5, the claims recite that the controller recited in claim 1 is provided in a BIOS. However, applicant's specification does not teach this feature. While the specification does teach that the BIOS may be used to control the storage of the operating state in flash, as well as the power management controller, the specification does not teach that a controller that is provided in the BIOS to accomplish this functionality. Applicant's specification appears to teach away from the claimed feature [Fig. 1, controller is a separate component from the BIOS].

Regarding claim 9, the claim recites the step of "checking whether the flash memory is enabled." However, applicant's specification does not teach this step. The specification

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teaches that the system checks to see if the flash memory is "mounted" [paragraph 32] or "connected" [paragraph 48].

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 9 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 9, the claim recites "determining the selection of the standby mode or the maximum power saving mode as the selection of the power saving standby mode when the flash memory is connected." It is unclear to the examiner what is being defined by this limitation. Since the power saving standby mode has already been selected [claim 9, line 3], examiner fails to see how the mode is "determined" by whether the flash memory is connected.

The examiner points out that the corresponding sections of applicant's specification are equally unclear [paragraphs 32 and 48], and do not provide any further elaboration what the aforementioned "determining" entails.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3-8, 12, 14, and 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Watts, U.S. Patent No. 6,336,161 B1.

Regarding claim 1, Watts, teaches:

a system memory [Fig. 1, memory subsystem 13];

a power management controller to control a supply power to the system [col. 1, line 57 to col. 2, line 8];

a flash memory [col. 2, lines 34-37];

and a controller to enable a power saving standby mode, to control the power management controller to store an operating state stored in the system memory to the flash memory, and to cut power supply to the system when the power saving standby mode is selected [Fig. 2a, 2b, 3a, 3b, col. 4, lines 8-38, 58 to col. 5, line 9].

Regarding claims 3 and 5, Watts teaches that the controller is provided in a BIOS [col. 4, lines 51-57].

Regarding claim 4, Watts teaches that the controller stores the operating state stored in the flash memory to the system memory when the power saving standby mode is changed to a normal mode in which normal operations are conducted [Fig. 3b, steps 64, 66].

Regarding claim 6, Watts teaches a method with steps comprising:

selecting a power saving standby mode [Fig. 3a, step 56];

storing an operating state stored in the system memory to a flash memory when the power saving standby mode is selected [steps 58, 60];

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and cutting power supply to the system after the operating state has been stored [step 62].

Regarding claim 7, Watts teaches re-supplying power to the system when the power saving standby mode is changed to a normal mode in which normal operations are conducted and storing the operating state stored in the flash memory to the system memory [Fig. 3b].

Regarding claim 8, Watts teaches that the power saving standby mode is selected via a user interface [col. 4, lines 10-12].

Regarding claim 12, Watts teaches that a predetermined time is set to enter the power saving standby mode [col. 4, lines 10-13].

Regarding claim 14, Watts teaches the limitations of claim 14 as recited in claim 1 and claim 4.

Regarding claim 17, Watts teaches the limitations of claim 16 as recited in claims 3 and 5.

Regarding claim 18, Watts teaches a method with steps comprising [Fig 3a, 3b]:
copying an operating state data stored in the system memory to a flash memory when a power saving standby mode of the computer system is activated; and
copying the operating state data back to the system memory when a normal mode of the computer system is activated.

Regarding claim 19, Watts teaches that the normal mode of the computer system is activated without a booting process [col. 2, lines 41-45].

Claims 1, 2, 6, 10, 13, 14, and 16 are rejected under 35 U.S.C. 102(a) and 35 U.S.C. 102(e) as being anticipated by Park, U.S. Patent Application Publication No. 2003/0145191 A1.

Regarding claim 1, Park teaches:

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a system memory [Fig. 1, main memory 5];
a power management controller to control a supply power to the system [paragraph 27];
a flash memory [paragraph 9];
and a controller to enable a power saving standby mode, to control the power management controller to store an operating state stored in the system memory to the flash memory, and to cut power supply to the system when the power saving standby mode is selected [Fig. 3, step 36].

Regarding claim 2, Park teaches that the flash memory is connected to a USB port [paragraph 39].

Regarding claim 6, Park teaches [Fig. 3]:
selecting a power saving standby mode;
storing an operating state stored in the system memory to a flash memory when the power saving standby mode is selected; and
cutting power supply to the system after the operating state has been stored.

Regarding claims 10 and 13, Park teaches a USB flash device [paragraph 39]; therefore the device is detachably provided to the computer system, and the USB port is used to restore/save from/to the flash memory device.

Regarding claim 14, Park teaches the limitations of claim 14 as recited in claim 1. Park also teaches storing the operating state to the system memory when a normal mode is selected [Fig. 4].

Regarding claim 16, Park teaches that the flash memory is a USB device.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11 and 15 rejected under 35 U.S.C. 103(a) as being unpatentable over Watts.

Regarding claims 11 and 15, it would have been obvious to one of ordinary skill in the art to provide a power management setup window in which the power saving standby mode is enabled. Watts teaches that the power saving standby mode may be user enabled [col. 4, lines 10-12], and that the Windows NT operating system is in view [col. 4, lines 53-57]. Additionally, at the time of the invention of Watts, the Windows operating systems were well-known in the art.

Claim 9 rejected under 35 U.S.C. 103(a) as being unpatentable over Watts in view of Park.

Regarding claim 9, Watts teaches selecting between a standby mode and a maximum power saving mode [low speed vs. off, suspend vs. sleep/hibernate, col. 1, lines 57-67]. Watts does not teach checking if a flash memory is enabled.

It would have been obvious to one of ordinary skill in the art to combine the teachings of Watts and Park by implementing the flash memory of Watts as a USB flash memory, as suggested by Park. Watts and Park are both directed towards similar subject matter. The teachings of Park would improve the system of Watts by providing a non-volatile memory that is portable and "handy to carry" [paragraph 9]. Since the flash memory device of Park is detachable, it would have further been obvious to one of ordinary skill in the art that Watts would also need to check to see if the flash device is connected, as taught by Park.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Garnett, U.S. Patent No. 6,851,614 B2;
Gonzalo, U.S. Patent No. 6,796,494 B1;
Rhoads et al., U.S. Patent No. 6,715,067 B1;
Stein et al., U.S. Patent No. 6,636,963 B1;
Kobayashi, U.S. Patent No. 6,513,113 B1;
Ryu, U.S. Patent No. 6,453,414 B1;
Shim et al., U.S. Patent No. 6,032,255;
Paul, U.S. Patent No. 5,991,875;
Stewart et al., U.S. Patent No. 5,815,706;
Govindaraj et al., U.S. Patent No. 6,901,298 B1.

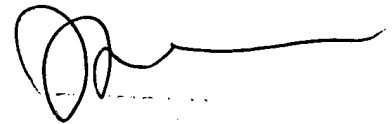
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ji H. Bae whose telephone number is 571-272-7181. The examiner can normally be reached on Monday-Friday, 10 am to 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Lee can be reached on 571-272-3667. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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A handwritten signature in black ink, consisting of a stylized 'J' and 'B' followed by a horizontal line.